International Association of Data Quality Managers

ECCMA/ISO Data Quality Standardization Update

PSMC Conference

2011-04-12

Chief Technical Officer

All parts management applications run better on ISO 8000 quality data!

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Quality master data is needed for:

- Part standardization during design and manufacture
- Item reduction studies during sustainment
- Sourcing and contracting

Data quality quotes

- ″Quality data is not a luxury - It is an operational, regulatory, and statutory requirement.″
- ″The definition of data quality is the ability of the data to meet requirements.″
- ″One of the root causes of poor data quality is not asking for the right data.″
- ″You are much more likely to receive high quality data if you accurately request the data that you need.″
- ″There is NO such thing as data accuracy - There are only assertions of data accuracy.″
- ″ISO 8000 is only concerned with the EXCHANGE of data, and more specifically, the exchange of high quality data.″
- ″A key concept of ISO 8000 is data portability - **Quality data is portable data.**″
- ″Data portability requires the combination of high quality data AND high quality metadata.″
- ″Every data element must be labeled with where it came from.″
- ″Metadata must be explicitly defined in an external open dictionary or defined within the data itself.″
- ″Syntax + Semantic Encoding (e.g., Metadata) + Specific Usage is what

ISO 8000

ISO/TS 8000-100:2009, Data quality -- Part 100: Master data: Overview

ISO 8000-102:2009, Data quality -- Part 102: Master data: Exchange of characteristic data: Vocabulary

ISO 8000-110:2009, Data quality -- Part 110: Master data: Exchange of characteristic data: Syntax, semantic encoding, and conformance to data specification

ISO/TS 8000-120:2009, Data quality -- Part 120: Master data: Exchange of characteristic data: Provenance

ISO/TS 8000-130:2009, Data quality -- Part 130: Master data: Exchange of characteristic data: Accuracy

ISO/TS 8000-140:2009, Data quality -- Part 140: Master data: Exchange of characteristic data: Completeness

ISO 22745

ISO 22745-1:2010, Industrial automation systems and integration -- Open technical dictionaries and their application to master data -- Part 1: Overview and fundamental principles

ISO/TS 22745-10:2010, Industrial automation systems and integration -- Open technical dictionaries and their application to master data -- Part 10: Dictionary representation

ISO 22745-11:2010, Industrial automation systems and integration -- Open technical dictionaries and their application to master data -- Part 11: Guidelines for the formulation of terminology

ISO 22745-13:2010, Industrial automation systems and integration -- Open technical dictionaries and their application to master data -- Part 13: Identification of concepts and terminology

ISO/TS 22745-14:2010, Industrial automation systems and integration - Open technical dictionaries and their application to master data -- Part 14: Dictionary query interface

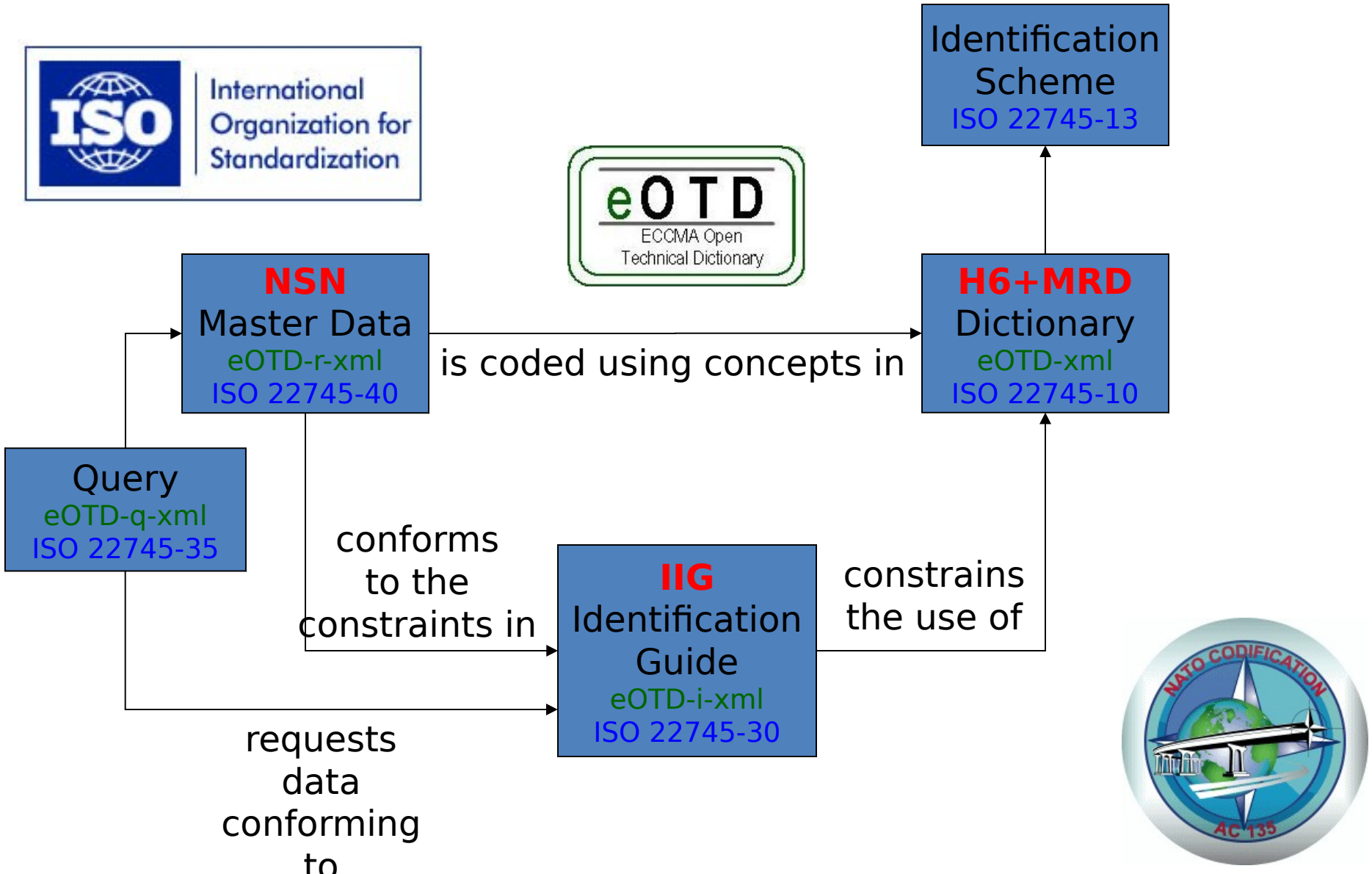
ISO 22745-20:2010, Industrial automation systems and integration -- Open technical dictionaries and their application to master data -- Part 20: Procedures for the maintenance of an open technical dictionary

ISO/TS 22745-30:2009, Industrial automation systems and integration -- Open technical dictionaries and their application to master data -- Part 30: Identification guide representation

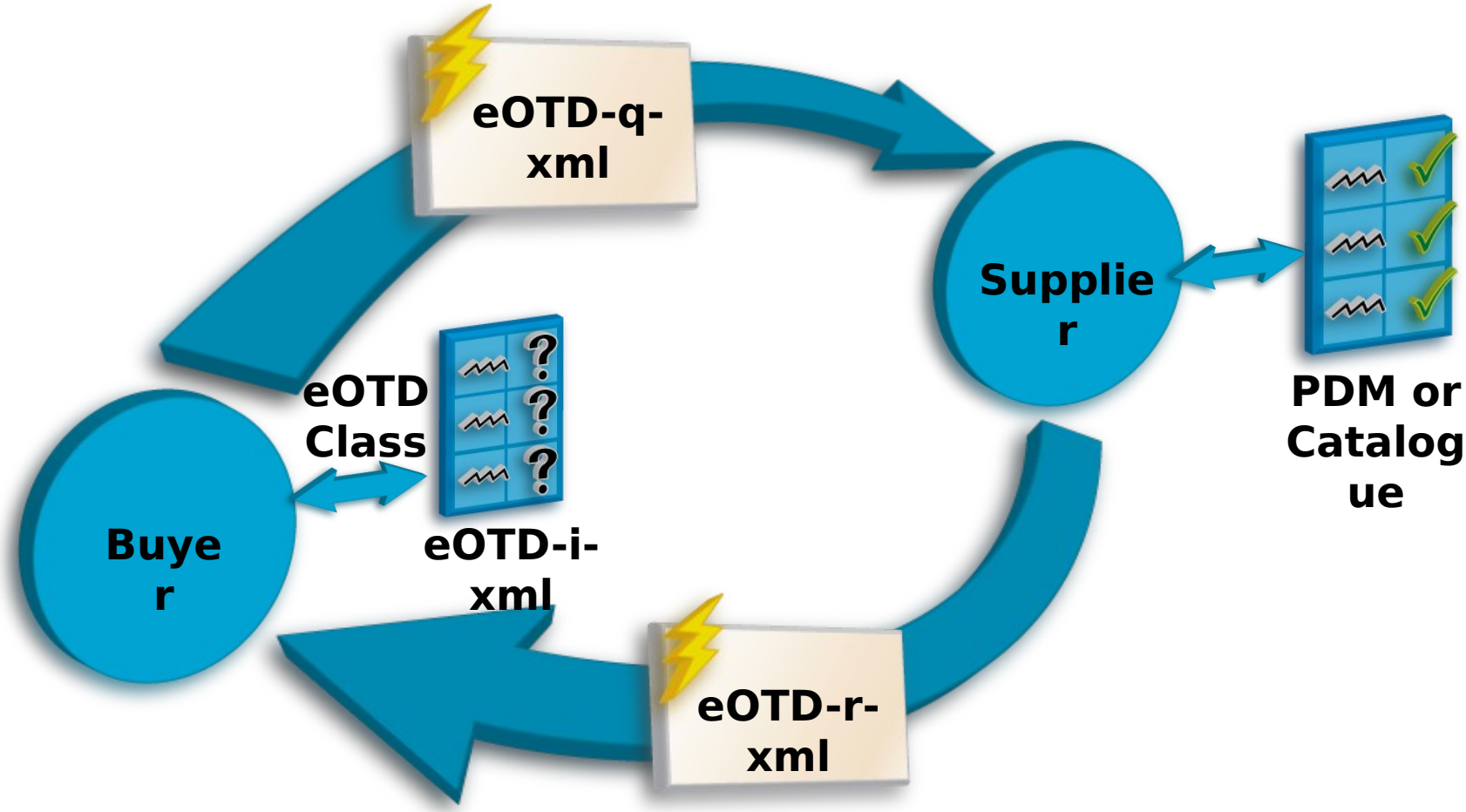
The ECCMA Open Technical Dictionary

- The ECCMA Open Technical Dictionary (eOTD) is an open technical dictionary of cataloging concepts used to create unambiguous language independent encoded descriptions of *individuals, organizations, locations, goods and services*
- The ECCMA Open Technical Dictionary (eOTD) is based on the NATO Codification System (NCS) with a more modern database architecture oriented toward the commercial world

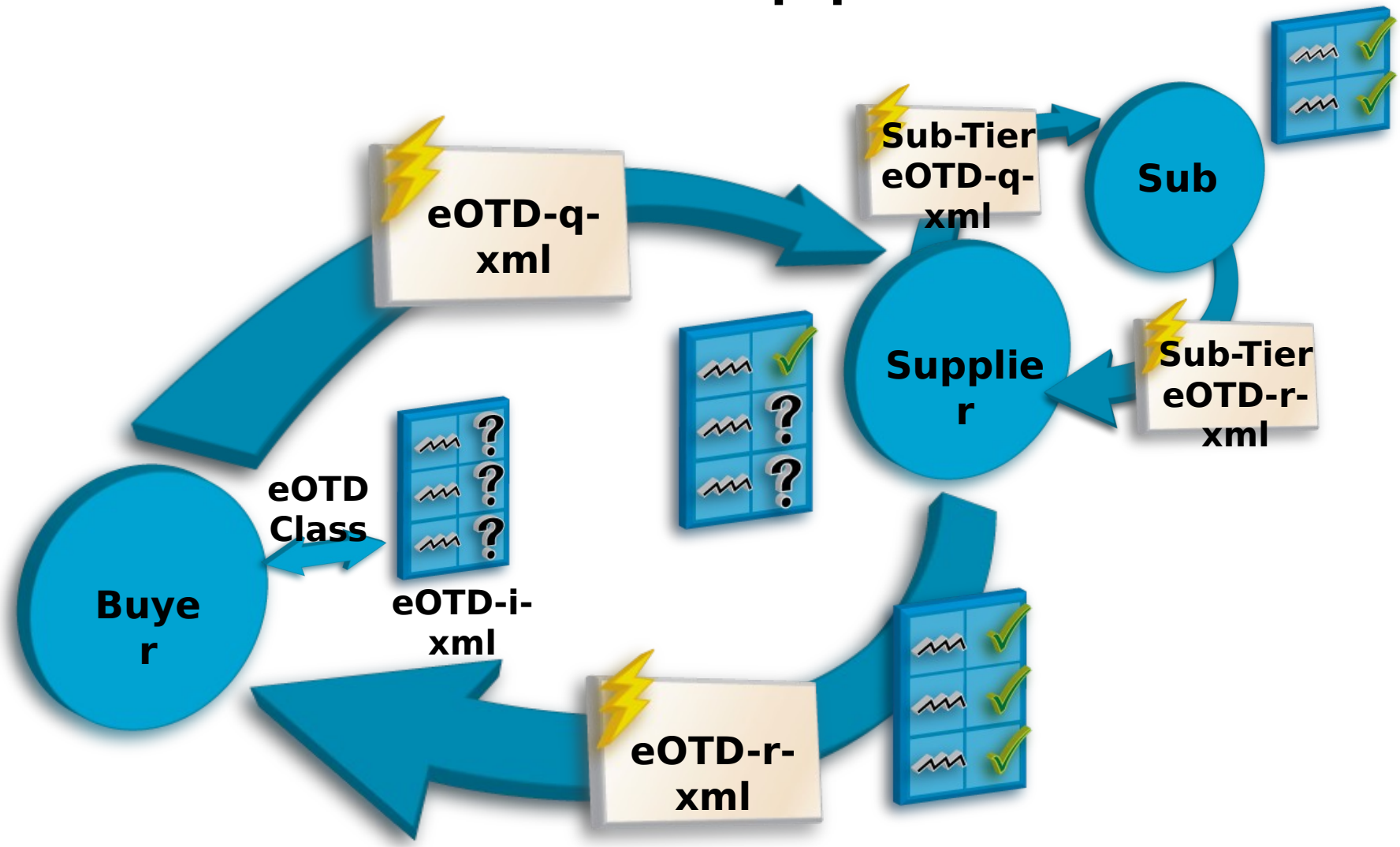
eOTD architecture – ISO 22745



Request for data



Request for data with sub-tier supplier



Thank you

Questions?

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